STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: October 13, 2014 Permit Number:

969035P

Date Expires: October 12, 2015

Issued To: Installation Address:

Tennessee Department of Safety and Homeland Security 1029 Firetower Road Kingston Springs Radio Site Kingston Springs

Installation Description:

One Internal Combustion 79 hp Propane/Natural Gas Fired 11-0096-01

Spark-Ignited Engine for an Emergency Generator

NSPS Subpa

Cummins Model GM 5.0L

Manufacture Year of Engine: 2014

Emission Source Reference No.

NSPS Subpart JJJJ NESHAP Subpart ZZZZ

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated July 31, 2014, and signed by Stephen Philyaw, Radio Systems Analyst for the permitted facility. If this person terminates employment or is assigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(Conditions continued on next page)

FECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

CN-0754 (Rev.2-13) RDA-1298

- 2. The stated design power output capacity for this internal combustion engine (Cummins GM 5.0L) is 79 horsepower. Any increase in this capacity will require a construction permit.
 - TAPCR 1200-03-09-.01(1)(d) and the application dated July 31, 2014.
- 3. Operating time for maintenance checks and readiness testing shall not exceed 100 hours per calendar year. Non-emergency operating time excluding maintenance checks and readiness testing shall not exceed 50 hours per calendar year.
 - TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ
- 4. Only propane and natural gas shall be used as fuel for this source.
 - TAPCR 1200-03-09-.01(1)(d) and the application dated July 31, 2014.
- 5. Particulate Matte r (TSP) emitted from this source shall not exceed 0.6 lb/MMBtu (0.4 pound per hour). Compliance with this emission limit shall be assured by compliance with **Conditions 2 and 4** of this permit.
 - TAPCR 1200-03-06-.02(2)
- 6. Carbon Monoxide (CO) emitted from this source shall not exceed 519 grams per kilowatt-hour (67.4 lb/hr).
 - TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ
- 7. Hydrocarbons and Nitrogen Oxides (HC + NO_X) emitted from this source shall not exceed 13.4 grams per kilowatt-hour (1.74 lb/hr).
 - TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ
- 8. Compliance with the emission limits in **Conditions 6 and 7** is based on compliance with **Conditions 2, 4, and 12** of this permit.
- 9. The generator shall be equipped with a non-resettable hour meter prior to startup of the engine.
 - TAPCR 1200-03-09-.03(8) and 40 CFR 60 Subpart JJJJ
- 10. Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity except for one six-minute period per one (1) hour or more than twenty four (24) minutes in any twenty four (24) hours. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).
 - TAPCR 1200-03-05-.01(1) and TAPCR 1200-03-05-.03(6)

(Conditions continued on next page)

11. The permittee shall keep a log of the number of operating hours for each calendar year, in a form that readily provides the information required in the following table and shows compliance with **Condition 3** of this permit. All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of each calendar quarter for which the data is required. The permittee shall retain this record at the source location for a period of not less than two (2) years and keep this record available for inspection by the Technical Secretary or their representative.

TAPCR 1200-03-10-.02(2)(a)

Year:				
	Operating Hours per Calendar Year			
Calendar quarter	Maintenance checks & readiness testing	Other non- emergency operation	Emergency operation	Comments**
Jan - Mar				
Apr - June				
July - Sept				
Oct - Dec				
Totals				

** The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.

- 12. Pursuant to 40 CFR §60.4243, the permittee shall comply with either of the following requirements:
 - (a) Operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions and keep records of conducted maintenance to demonstrate compliance; or
 - (b) Keep a maintenance plan and records of conducted maintenance to demonstrate compliance, and to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Performance testing is not required for an owner or operator of a stationary SI internal combustion engine less than 100 hp.

(Conditions continued on next page)

13. Under the Provisions of 40 CFR 63 Subpart ZZZZ-National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), this facility is considered to be "new" stationary RICE located at an "Area Source." This unit is considered to be new because its construction commenced on or after June 12, 2006. (§63.6590)

This rule states that "new" RICE units at area sources that started up after January 18, 2008, must comply with the applicable emission limitations and operating limitations upon startup.

§63.6590(c) states that a new or reconstructed stationary RICE located at an area source must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for stationary spark ignition internal combustion engines. No further requirements apply for such engines under Subpart ZZZZ.

TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ

14. This permit is valid only at this location.

TAPCR 1200-03-09-.03(6)

15. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards.

TAPCR 1200-03-09-.01(1)(d)

16. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application.

TAPCR 1200-03-09-.03(8)

17. The permittee shall apply for a standard operating permit within thirty (30) days of initial start-up of this emission source.

TAPCR 1200-03-09-.02(1) and (3)

18. This permit shall serve as a temporary operating permit from the date of issuance to the receipt of a standard operating permit, provided that an application for an operating permit is submitted within the time period specified in **Condition 17** of this permit and that the conditions of this permit and any applicable emission standards are met.

TAPCR 1200-03-09-.02(2)

(Conditions continued on next page)

19. The permittee shall certify the start-up date of the air contaminant source regulated by this permit by submitting

A COPY OF ALL PAGES OF THIS PERMIT,

with the information required in A) and B) of this condition completed, to the Technical Secretary's representatives listed below:

- A) DATE OF START-UP: $\frac{}{\text{month}} / \frac{}{\text{day}} / \frac{}{\text{year}}$
- B) Anticipated operating rate: percent of maximum rated capacity

For the purpose of complying with this condition, "start-up" of the air contaminant source shall be the date of the setting in operation of the source for the production of product for sale or use as raw materials or steam or heat production.

The undersigned represents that he/she has the full authority to represent and bind the permittee in environmental permitting affairs. The undersigned further represents that the above provided information is true to the best of his/her knowledge and belief.

Signature		Date
Signer's name (type or print)	Title	Phone (with area code)

Note: This certification is $\underline{\text{not}}$ an application for an operating permit. At a minimum, the appropriate application form, usually an APC-100, must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be delivered to the West Tennessee Permit Program at the email address listed below no later than 30 days after the air contaminant source is started-up.

Air.Pollution.Control@Tn.Gov

(End of conditions)